Acta Zootaxonomica Sinica, 34 (4): 868 - 870 (Oct., 2009) ISSN 1000-0739
动物分类学报

中国红树林植物白骨壤上的斜瘿螨属一新种 (蜱螨亚纲, 瘿螨总科)

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摘 要 记述红树林植物白骨壤上的瘿螨亚科 Eriophyinae 斜瘿螨属 *Acaralox* 1 新种: 白骨壤斜瘿螨 *Acaralox marinae* sp. nov., 给出了斜瘿螨属的分种检索表。

关键词 蜱螨亚纲, 瘿螨科, 瘿螨亚科, 斜瘿螨属, 新种, 红树林, 白骨壤, 中国.

中图分类号 Q959.226

红树林一般位于海陆交错带, 主要集中于周期性遭受海水浸淹的海岸潮间带和滩涂上 (Lin, 2001), 是生长在热带和亚热带海岸潮间带的一种特殊的常绿植物群落 (Lin, 2003)。白骨壤 *Avicennia marina* (Forsk.) Vierh. 是红树林植物中的一种, 因其茎秆呈白色而得名。自然分布在低潮带, 仅有少数可分布到高潮带, 是红树林先锋树种。在大潮时仅露出树冠顶端甚至全部淹没, 曾被称为"海底森林"或"海底绿岛"。在这个特殊的生态系统中, 目前已知全世界在红树植物 *Avicernnia nitida* Jacq, *Avicernnia officianlis* L., *Avicennia resinifera* Forst. f. 和白骨壤 *Avicennia marina* (Forsk.) Vierh. 上分别采集到 1 种瘿螨, 在半红树植物海桑 *Excoecaria agallocha* L. 上采集到 3 种。本文记述了白骨壤上的瘿螨科 Eriophyidae 瘿螨亚科 Eriophyinae 斜瘿螨属 *Acaralox* 的 1 新种, 该属是 Keifer 于 1966 年建立, 模式种为 *Acaralox harperi* Keifer, 1966, 目前全世界共记载 2 种 (Amrine, 2003)。本文所用量度单位为 μm。全部模式标本保存在广西大学农学院。

斜瘿螨属分种检索表

1. 羽状爪 7-8 支, 基节具条状饰纹 ……………… *Acaralox bambusae* Kuang, 2002
   羽状爪 5 支, 基节具点状饰纹 ……………… 2
2. 背盾板两侧缘具短条状饰纹, 背环光滑 ……………… *Acaralox marinae* sp. nov.
   背盾板两侧缘具颗粒状饰纹, 背环有圆形或椭圆形微瘤 ……………… *Acaralox harperi* Keifer, 1966

白骨壤斜瘿螨, 新种 *Acaralox marinae* sp. nov. (图 1～6)

雌螨 体纺锤形, 乳白色, 长 164.0～236.0, 宽 51.5～55.5, 厚 40.0～55.5。喙长 28.5, 斜下伸。背盾板长 30, 宽 40, 无前叶突; 背中线不完整, 在中部断开, 缺基部和端部的 1/5; 侧中线完整, 亚中线不完整, 缺基部 2/7 和端部的 1/7; 两侧缘具短条状饰纹。背瘤位于背盾板后缘之前近后缘, 瘤距 20, 背毛 7.5, 内后指。足 I基节间具胸线, 基节刚毛 I 13.5, II32.0, III43.5; 基节具点状饰纹。足分节正常, 具模式刚毛; 足 I 长 31.5, 股节 9.5, 股节刚毛 15.0; 膝节 4.5, 膝节刚毛 22.5; 胫节 7.5, 胫节刚毛 6.5, 着生在背基部 1/3 处; 跗节 7.5; 羽状爪单一, 5 支, 爪端球不明显。足 II长 28.5, 股节 9.0, 股节刚毛 12.0; 膝节 4.5, 膝节刚毛 13.0; 胫节 6.0, 跗节 7.0; 羽状爪单一, 5 支, 爪端球不明显。大体具宽的背中槽, 背腹环数相仿, 52～59 个, 背环光滑, 腹环具条形或刺形微瘤。侧毛 35.0, 生于 9 环; 腹毛 I43.0, 生于 24 环; II20.0, 生于 38 环; III28.5, 生于体末 6 环, 有副毛。雌性外生殖器长 12.0, 宽 21.0, 生殖器盖片上有纵肋 14 条, 性毛 16.5。

雄螨 未采到。

正模 ♀, **副模** 14 ♀♀, 广西北海市, 2007-04-05, 李德伟和蓝肖采。

寄主: 白骨壤 *Avicennia marina* (Forsk.) Vierh. (红树类 mangrove, 马鞭草科 Verbenaceae)。螨虫在植物叶片表面营自由生活, 无明显为害状。

词源: 新种种名取自寄主植物种名。

新种与竹斜瘿螨 *A. bambusae* 相近似, 但新种背盾板无前叶突, 侧中线完整, 两侧缘具短条状饰纹; 背环光滑; 羽状爪 5 支等与 *A. bambusae* 区别 (在竹斜瘿螨 *A. bambusae* 上, 背盾板具前叶突, 侧中线不

广西林业科技专项项目资助 (桂林科字 [2009] 12 号).
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收稿日期: 2009-06-26, 修订日期: 2009-08-11.

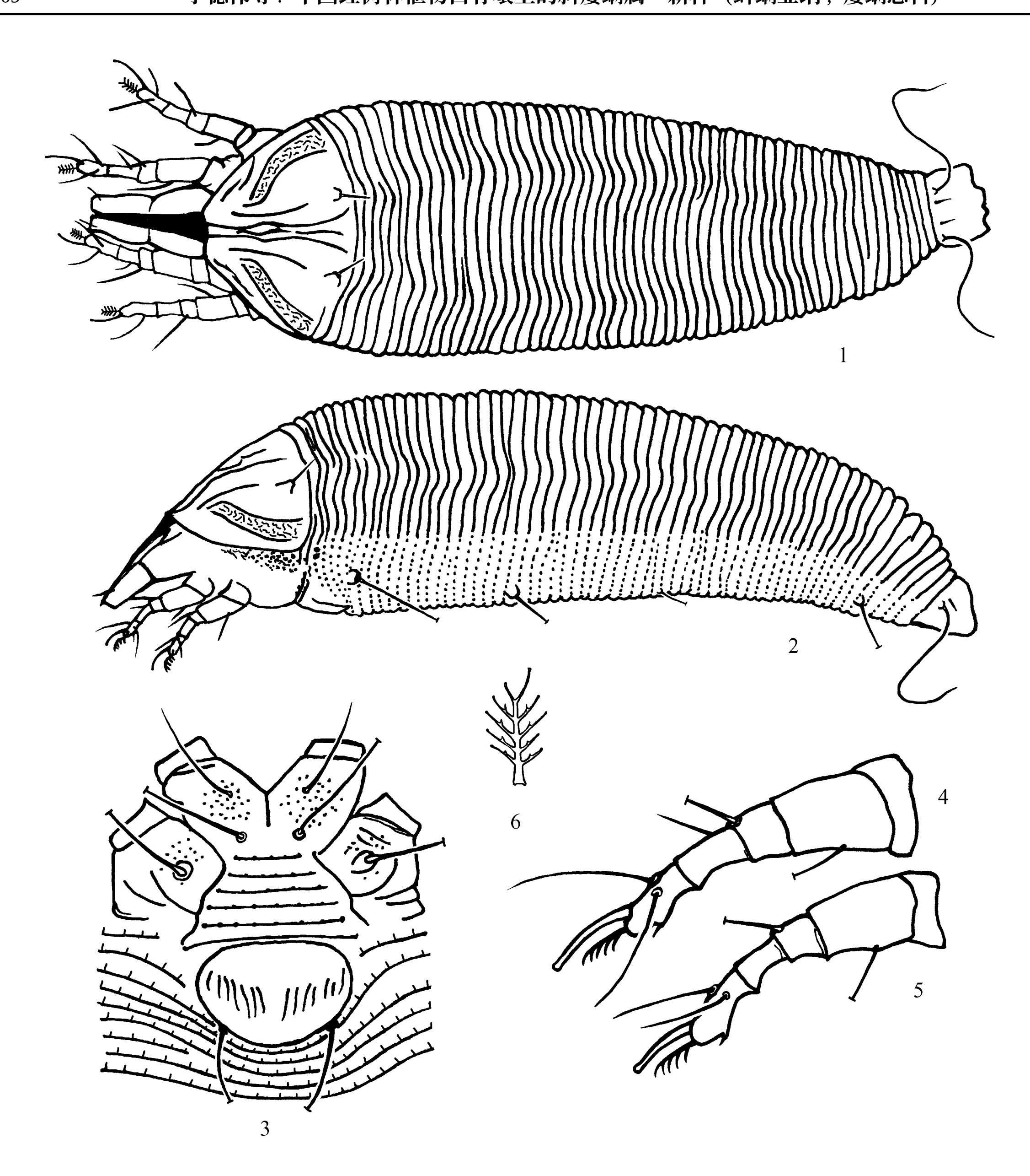


图 1～6 白骨壤斜瘿螨, 新种 *Acaralox marinae* sp. nov. (female)

1. **雌螨背面观** (dorsal view of female) 2. **雌螨侧面观** (lateral view of female) 3. **雌螨足基节及生殖器** (coxigenital area of female) 4. **足 Ⅰ** (leg Ⅰ) 5. **足 Ⅱ** (leg Ⅱ) 6. **羽状爪** (empodium)

完整, 两侧缘无短条状饰纹; 背环具圆形微瘤; 羽状爪 7～8 支); 新种与 *A. harperi* **也很相似, 但新种背盾板两侧缘具短条状饰纹, 背环光滑等与** *A. harperi* **区别 (在** *A. harperi* **上, 背盾板两侧缘具颗粒状饰纹, 背环有圆形或椭圆形微瘤)。**

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A NEW SPECIES OF ACARALOX (ACARI, ERIOPHYOIDEA) INFESTING MANGROVE, AVICENNIA MARINA (FORSK.) VIERH., FROM CHINA

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Abstract In this paper, a new species of *Acaralox* Keifer (Eriophyidae, Eriophyinae), namely *Acaralox marinae* Li sp. nov., infesting mangrove *Avicennia marina* (Forsk.) Vierh. (Verbenaceae), is described and illustrated from South China. All measurements are given in μm. The type specimens are deposited in the College of Agriculture, Guangxi University. A key to the species of *Acaralox* from the world is provided.

Key to *Acaralox* species in the world

1. Empodium 7 or 8-rayed, coxal area with short lines ······························ *Acaralox bambusae* Kuang, 2002
   Empodium 5-rayed, coxal area with granules ························ 2
2. Shield design with many short lines at each lateral side, dorsal annuli smooth ························ *Acaralox marinae* sp. nov.
   Shield design with granular at each lateral side, dorsal annuli with rounded or elliptical microtubercles ············ *Acaralox harperi* Keifer, 1966

Acaralox marinae sp. nov. (Figs. 1-6)

Female. Body spindleform, ivory-whitish, 164.0-236.0 long, 51.5-55.5 wide, 40.0-55.5 thick. Gnathosoma 28.5 long, projecting obliquely down. Prodorsal shield: frontal lobe absent; 30.0 long, 40.0 wide; shield design with many short lines at each lateral side; median line incomplete, discontinuous, 1/5 at basal and 1/5 at anterior absent, respectively; admedian lines complete; submedian lines incomplete, absent 1/7 at basal and 2/7 at anterior. Scapular tubercles and scapular setae very near rear shield margin, 20 apart, scapular setae (sc) 7.5, projecting posteriorly. Coxae: with a sternal line, coxal area with granules; anterolateral setae on coxisternum Ⅰ (1b) 13.5, proximal setae on coxisternum Ⅰ (1a) 32.0, proximal setae on coxisternum Ⅱ (2a) 43.5. Legs: segments and setae normal; leg Ⅰ 31.5, femur 9.5, basiventral femoral setae (bv) 15.0; genu 4.5, antaxial genual setae (l″) 22.5; tibia 7.5, paraxial tibial setae (l′) 6.5, located at basal 1/3; tarsus 7.5; tarsal empodium simple, 5-rayed, tarsal solenidion ending as small knob; leg Ⅱ 28.5, femur 9.0, basiventral femoral setae (bv) 12.0; genu 4.5, antaxial genual setae (l″) 13.0; tibia 6.0, tarsus 7.0; tarsal empodium simple, 5-rayed, tarsal solenidion ending as small knob. Opisthosoma: dorsum with broad longitudinal dorsal furrow; annuli subequal dorsoventrally, 52-59 annuli, dorsal annuli smooth, ventral annuli with round microtubercles; setae c2 35.0, on ventral annulus 9; setae d 43.0, on ventral annulus 24; setae e 20.0, on ventral annulus 38; setae f 28.5, on 6th ventral annulus from rear. Setae h1 present. Female genitalia 12.0 long, 21.0 wide, coverflap with 14 longitudinal ridges; proximal setae on coxisternum Ⅲ (3a) 16.5.

Male. Unknown.

Holotype ♀, paratypes 14 ♀♀, Beihai City, Guangxi Zhuangzu Autonomous Region, 5 Apr. 2007, collected by LI De-Wei and LAN Xiao.

Host. *Avicennia marina* (Forsk.) Vierh. (mangrove, Verbenaceae). Mites are vagrant on the undersurfaces of the leaves, no visible damage.

Etymology. The species name is derived from the name of the host plant.

Note. This species is similar to *A. bambusae*, but can be separated from the latter by prodorsal shield without frontal lobe, shield design with many short lines at each lateral side, admedian lines complete; dorsal annuli smooth and empodium 5-rayed (in *A. bambusae*, prodorsal shield with frontal lobe, without short lines at each lateral side, admedian lines incomplete; dorsal annuli with rounded microtubercles and empodium 7 or 8-rayed). The new species is also similar to *A. harperi*, but can be differentiated from the latter by shield design with many short lines at each lateral side, dorsal annuli smooth (in *A. harperi*, shield design with granular at each lateral side, dorsal annuli with rounded or elliptical microtubercles).

Key words Acari, Eriophyidae, Eriophyinae, *Acaralox*, new species, mangrove, *Avicennia marina*, China.

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